

**CLAIRVAUX MACKILLOP COLLEGE**

**Year 9 Science**

## Task Name: What’s Happening at (Your Earth Structure?)

## Task Description : You will prepare a podcast or movie in which you will use the Theory of Plate Tectonics to explain “What’s Happening at Your Earth Structure”.

## *As a Team you will research “What’s Happening at Your Earth Structure.” You will collect and analyse evidence of changes occurring and propose possible reasons for these based on scientific theory. You should use research, images, diagrams and scientific concepts and models to link your ideas and justify your conclusions.*

**You should include :**

* Description of the location of Your Earth Structure in the world - you could find some images and/or maps to illustrate the main features of the area.
* Photos and explanation of the topography of the region.
* Evidence of the location, magnitude and depth of earthquakes in and near your region. Are there any patterns in the data? How could you display this evidence?
* Classification of any volcanoes or patterns of volcanic activity . Collect and display evidence to support your ideas about patterns and trends .
* Reasoned analysis of the movement of tectonic plates in and near the region based on research and collected evidence .
* Model or explanation of the processes causing these events at this place .

**TASK 1 STORYBOARD**

Use the template of the storyboard you have been given and prepare an outline of the contents of your Movie . Your teacher will be using your storyboard as one of the MAIN pieces of evidence of your progress in this assignment.

***Due Date: To be advised by the class teacher.***

**TASK 2 PODCAST OR VIDEO**

Using suitable software ( generally Audacity and Windows Live Moviemaker, or PowerPoint) assemble a Podcast or Movie to describe the processes that are changing and shaping the Earth's Crust at your location. It is expected that your Movie will include a minimum of 7 and a maximum of 12 images Your explanations will recorded in a sound track embedded or attached to your Movie. **Your movie should be saved in wmv format and will need to be uploaded to a location nominated by your teacher.**

## *Due Date: Term 2 Week 7*

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| **UNDERSTANDING** | **A** | **B** | **C** | **D** | **E** |
| *Describes changes in the earth structure and relates to movements in plates* | **Comprehensive description** of the earth structure at the location ;links movements at the plate boundaries and changes in the earth’s structures. | **Significant description** of the earth structure and explanation of relationships between movements at the plate boundaries and changes in the earth’s structures | **Description** of the earth structure and identification of movements at the plate boundaries and changes in the earth’s structures. | **Statements of scientific information** about the earths structure . | **Statement of isolated scientific facts** |
| *Uses Plate Tectonic Theory to explain plate movements* | **Reasoned analysis** of the Plate Tectonic Theory and the use of scientific knowledge to test claims, explanations or predictions. | **Analysis** of the Plate Tectonic Theory and the use of scientific knowledge to test claims, explanations or predictions | **Description** of the Plate Tectonic Theory and the use of scientific knowledge to test claims, explanations or predictions | **Statements** about Plate Tectonics and how science is used to test claims | **Statement of isolated scientific facts** |

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| **SKILLS** | **A** | **B** | **C** | **D** | **E** |
| *Collects and analyses data to construct meaning .* | **Comprehensive collection of images and processed data** used to identify and illustrate trends . | **Significant collection of images and processed data** used to identify and illustrate trends. | **There is no processed data.**  Images and data show the trends adequately. | **An attempt** has been made to select data to show trends. |  |
| *Uses data to justify conclusions about direction and type of plate movement .* | **Comprehensive analysis** of trends in data to explain relationships and develop justified conclusions. | **Significant analysis** of data to describe relationships and to develop supported conclusions. | **Analysis of data** to identify relationships and to develop conclusions | **Description** of data and statements of conclusions | Listing of data and superficial statements of conclusions |
| *Communicates ideas clearly* | **Clear and purposeful** use of appropriate scientific language and effective use of ICT to concisely communicate findings and ideas in movie format | P**urposeful** use of appropriate scientific language and ICT to effectively communicate findings and ideas in movie format. | **Use of appropriate scientific** language and ICT to communicate findings and ideas in a movie format. | **Use of aspects of scientific** language and ICT to communicate findings and ideas . | **Use of everyday language to** communicate findings and ideas. |